

Amendments to the Claims:

1. (currently amended) A method of processing digital signals to be transmitted in analog form, said method comprising:

in a digital-to-analog converter having a conversion frequency, converting a digital signal having an input frequency to produce an analog signal image at a radio frequency greater than the input frequency, wherein at least one of the input frequency and the conversion frequency is selected in respect to the other such that said analog image falls within a designated communication band; and

using said analog signal image at said radio frequency for transmission.

2. (original) The method of claim 1 comprising:

positioning said digital signal within a conversion bandwidth defined as one-half the rate of said converting.

3. (currently amended) The method of claim 1, wherein said digital signal is part of a plurality of digital signals, and the method further comprises comprising:

receiving a plurality of digital signals;

positioning said plurality of digital signals in non-overlapping portions of a conversion bandwidth defined as one-half the rate of said converting;

converting said plurality of digital signals to produce analog signal images at different transmission frequencies; and

using said analog signal images for transmission.

4. (original) The method of claim 3 wherein said step of using includes:

providing an analog signal image onto a path;

amplifying said analog signal image on said path; and

transmitting said amplified analog signal image using at least one antenna.

5. (original) The method of claim 4 wherein said steps of providing, amplifying and transmitting include:

providing a first analog signal image of a first frequency band on a first path and a second analog signal image of a second frequency band on a second path;

amplifying said first analog signal image on said first path and said second analog signal image on said second path; and

transmitting said first amplified analog signal image on a first antenna and said second amplified analog signal image on a second antenna.

6. (original) The method of claim 4 further comprising:

filtering a plurality of analog signal images at different frequency bands to provide at least one analog signal image of a frequency band corresponding to each of a plurality of paths.

7. (original) The method of claim 4 further comprising:

selectively producing on each of a plurality of paths at least one analog signal image of a frequency band corresponding to each of said plurality of paths.

8. (currently amended) The method of claim 1 further comprising:

adjusting a conversion rate for converting said digital signal to produce said analog signal image at said ~~RF~~ radio frequency.

9. (currently amended) The method of claim 1 further comprising:

adjusting a frequency for said digital signal to be converted into analog form to produce said analog signal image at said ~~RF~~ radio frequency.

10-18. (cancelled)

19. (currently amended) A transmitter comprising:

a digital to analog converter having a conversion frequency and configured to receive a digital signal having an input frequency and convert said digital signal into analog form, thereby producing ~~an~~ at least one analog signal image at a radio frequency greater than the input frequency, wherein at least one of the input frequency and the conversion frequency is selected in respect to the other such that said analog image falls within a designated communication band; and

transmitter circuitry configured to use said analog signal image at said radio frequency for transmission.

20. (original) The transmitter of claim 19 comprising:

signal processing circuitry configured to position said digital signal within a conversion bandwidth defined as one-half the rate of converting said digital signal into analog form.

21. (currently amended) A ~~The transmitter of claim 19~~ comprising:

signal processing circuitry configured to receive a plurality of digital signals and to position said digital signals in non-overlapping portions of a conversion bandwidth defined as one-half the rate of said converting;

a digital to analog converter having a conversion frequency and configured to receive a plurality of digital signals, each having an input frequency, and to convert each digital signal of said plurality into analog form, thereby to produce analog signal images at different radio frequencies, each of which is greater than the corresponding input frequency; and

~~said digital to analog converter configured to convert said digital signals to produce analog signal images at different transmission frequencies; and~~

said transmitter circuitry configured to use said analog signal images for transmission, wherein the input frequencies are chosen in respect of the conversion frequency, or the conversion frequency is chosen in respect of the input frequencies, such that said analog images fall within one or more designated communication bands.

22. (currently amended) The transmitter of claim 19 wherein said transmitter circuitry ~~comprising~~ comprises:

a path for carrying said analog signal image;

an amplifier on said path for amplifying said analog signal image on said path;

and

at least one antenna for transmitting said amplified analog signal image.

23. (original) The method of claim 21 wherein said transmitter circuitry comprises:

signal distribution circuitry configured to receive said analog signal images from said digital to analog converter and to provide a first analog signal image of a first

frequency band on a first path and a second analog signal image of a second frequency band on a second path;

a first amplifier on said first path for amplifying said first analog signal image on said first path;

a second amplifier on said second path for amplifying said second analog signal image on said second path;

a first antenna connected to said first path for transmitting said first amplified analog signal image; and

a second antenna connected to said second path for transmitting said second amplified analog signal image.

24. (original) The transmitter of claim 19, said transmitter configured to adjust a conversion rate for said digital to analog converter to produce said analog signal image at said radio frequency.

25. (original) The transmitter of claim 19, said transmitter configured to adjust a digital frequency for said digital signal to be converted into analog form to produce said analog signal image at said radio frequency.

26-32. (cancelled)